

## LASER DEVICE

Patent Number: JP2090585

Publication date: 1990-03-30

Inventor(s): OGAWA TAKESHI

Applicant(s): NEC CORP

Requested Patent:  JP2090585

Application Number: JP19880242795 19880927

Priority Number(s):

IPC Classification: H01S3/18; H01L31/12

EC Classification:

Equivalents:

### Abstract

**PURPOSE:** To facilitate the mounting and bonding of a laser chip so as to improve a laser device in productivity and manufacturing yield by a method wherein the laser chip mounted on the upside of a mount and a photodetecting element are provided, and the photodetecting element is installed making its light detecting face tilted by a specified angle with light emitted from the laser chip.

**CONSTITUTION:** A laser chip 1 is mounted on the upside of a mount 5 formed on a stem 4 of a package. A monitoring photodetective element 3 provided with a reflective film 6 whose reflectivity is 80-95% formed on its surface is installed making an angle of 45 degrees with light rays outputted from the laser chip 1. Light rays outputted from the laser chip 1 is reflected from the surface of the monitoring photodetecting element 3 and 80-95% of it is taken outside as a primary beam 2 through a window. The rest, 5-10% of the light, is made to be incident on a monitoring photodetective element 3 as monitored light rays.

Data supplied from the **esp@cenet** database - I2



(19)

(11) Publication number: 01

Generated Document.

**PATENT ABSTRACTS OF JAPAN**(21) Application number: **63242795**(51) Int'l. Cl.: **H01S 3/18 H01L 31/12**(22) Application date: **27.09.88**

(30) Priority:

(43) Date of application publication: **30.03.90**

(84) Designated contracting states:

(71) Applicant: **NEC CORP**(72) Inventor: **OGAWA TAKESHI**

(74) Representative:

**(54) LASER DEVICE****(57) Abstract:**

**PURPOSE:** To facilitate the mounting and bonding of a laser chip so as to improve a laser device in productivity and manufacturing yield by a method wherein the laser chip mounted on the upside of a mount and a photodetecting element are provided, and the photodetecting element is installed making its light detecting face tilted by a specified angle with light emitted from the laser chip.

**CONSTITUTION:** A laser chip 1 is mounted on the upside of a mount 5 formed on a stem 4 of a package. A monitoring photodetective element 3 provided with a reflective film 6 whose reflectivity is 80-95% formed on its surface is installed making an angle of 45 degrees with light rays outputted from the laser chip 1. Light rays outputted from the laser chip 1 is reflected from the surface of the monitoring photodetecting element 3 and 80-95% of it is taken outside as a

primary beam 2 through a window. The rest, 5-10% of the light, is made to be incident on a monitoring photodetective element 3 as monitored light rays.

COPYRIGHT: (C)1990,JPO&Japio

